

## PATENT COOPERATION TREATY

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## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 04 September 2000 (04.09.00)	
International application No. PCT/US00/00794	Applicant's or agent's file reference CM2000XM/JB
International filing date (day/month/year) 13 January 2000 (13.01.00)	Priority date (day/month/year) 14 January 1999 (14.01.99)
Applicant SHOWELL, Michael, Stanford et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

04 August 2000 (04.08.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Antonia Muller
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

REC'D 17 JAN 2001



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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CM2000XM/JB	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/00794	International filing date (day/month/year) 13/01/2000	Priority date (day/month/year) 14/01/1999
International Patent Classification (IPC) or national classification and IPC C11D3/386		
Applicant THE PROCTER & GAMBLE COMPANY et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"><li>I <input checked="" type="checkbox"/> Basis of the report</li><li>II <input type="checkbox"/> Priority</li><li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li><li>IV <input type="checkbox"/> Lack of unity of invention</li><li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li><li>VI <input type="checkbox"/> Certain documents cited</li><li>VII <input checked="" type="checkbox"/> Certain defects in the international application</li><li>VIII <input type="checkbox"/> Certain observations on the international application</li></ul>		
Date of submission of the demand  04/08/2000	Date of completion of this report  15.01.2001	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Irwin, L  Telephone No. +49 89 2399 2527 	

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/00794

**I. Basis of the report**

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).):*

**Description, pages:**

1-94 as originally filed

**Claims, No.:**

1-11 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/00794

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## **V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

### **1. Statement**

Novelty (N)	Yes:	Claims	1 - 11
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1 - 11
Industrial applicability (IA)	Yes:	Claims	1 - 11
	No:	Claims	

2. Citations and explanations  
**see separate sheet**

## **VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US00/00794

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The following documents cited are:

D1: WO9806808A (THE PROCTER & GAMBLE CO.) 19 February 1998 (1998-02-19)

D2: WO9839403A (THE PROCTER & GAMBLE CO.) 11 September 1998 (1998-09-11)

D3: WO9739091A ( THE PROCTER & GAMBLE CO.) 23 October 1997 (1997-10-23)

**Novelty:**

The subject matter of the independent claim 1 is novel since the combination of features expressed in this claim has not been disclosed in the cited prior art. The mid-chain branched anionic surfactant has been previously disclosed in as much detail and also has the use of pectate lyase enzymes in surfactant compositions, but not together in combination in the same composition.

Therefore the subsequent dependent claims are also novel.

The independent claim 11 is also novel since the composition used in this method is novel.

Therefore claims 1 - 11 are novel according to Article 33(2) of the PCT.

**Inventive Step:**

Regarding the presence of an inventive step for the above claims, using the 'problem - solution' approach, the technical problem has been formulated as follows: "How to provide a superior cleaning composition that can effectively remove plant based soils and body soils as well as greasy stains".

The closest prior art has been taken to be document D1 since this document discloses laundry and hard surface cleaning compositions that also uses the synergistic effect of having both an anionic surfactant and an enzyme in the cleaning composition so as to

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US00/00794

improve the removal of stains, particularly food and other organic based soils, please see D1: description, page 1 (paragraph 3), and page 4 (paragraph 3).

Therefore the combination of a good deterative surfactant with an enzyme is known and so the application therefore discloses an alternative composition that achieves the above effects.

The remaining prior art documents D2 and D3 also disclose cleaning compositions that contain both enzymes and surfactants in the same composition in order to increase the detergency for the effective removal of greasy stains, and the enzymes help remove the plant based stains. Document D3 covers the use of the surfactants given in claim 1 of the application (see D3: description, page 11 (3rd paragraph) - page 12.). Also suggested in document D3 is the use of enzymes (see D3: description, page 48) to increase the removal of protein- and carbohydrate- based stains from substrates, although the specific use of pectate lyases is not given.

It was thus obvious for a skilled man to use in D1 surfactants like those used in the present application which were known and commercially available, instead of the specific surfactants used in that document. Therefore there is no inventiveness in using these combinations with pectate lyase. Moreover, it is unlikely that a synergistic effect, if present, is expressed in the entire scope of the claim with any of the hundreds of different surfactants covered by the claim.

Therefore the subject matter of the claims 1 - 11 are not inventive according to Article 33(3) of the PCT.

**Re Item VII**

**Certain defects in the international application**

The phrase "... herein incorporated by reference" as used in the description on page 56 (line 23) is an expression not to be used (Rule 9.1(iv) of the PCT, Guidelines PCT/GL/3 III, 4.3a).

Contrary to the requirements of Rule 5.1(a)(ii) of the PCT, the relevant background art

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US00/00794

disclosed in document D1 and D2 is not mentioned in the description, nor are these documents identified therein.

The independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) of the PCT, which in the present case would be appropriate, with those features known in combination with the prior art document D1 being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

Reference has been made to certain non pre-published documents in the description, page 2 (lines 28 - 29) (see the guidelines, PCT/GL/C II, 4.18).

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
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EE	Estonia	LR	Liberia	SG	Singapore		



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## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>CM2000XM/JB</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 00/ 00794</b>	International filing date (day/month/year) <b>13/01/2000</b>	(Earliest) Priority Date (day/month/year) <b>14/01/1999</b>
Applicant <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

**DETERGENT COMPOSITIONS COMPRISING A PECTATE LYASE AND A SPECIFIC SURFACTANT SYSTEM**

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

Int. Application No

PCT/US 00/00794

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 C11D3/386 C11D1/02 C11D1/75 C11D1/83		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7 C11D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 06808 A ( THE PROCTER & GAMBLE CO.) 19 February 1998 (1998-02-19)	1,5-7,10
Y	page 4 -page 6 page 9, paragraph 2 page 41 -page 42 page 32 -page 35 claims 1-3,12-14; examples 14,19	1-11
X	WO 98 39403 A ( THE PROCTER & GAMBLE CO.) 11 September 1998 (1998-09-11)	1,5-7,10
Y	page 6, line 25 - line 36 page 26, line 5 -page 27, line 3 page 18, line 1 -page 19, line 35 claims 1,6,9-11; examples 19,20	1-11
-/--		
<div style="display: flex; justify-content: space-between;"> <span><input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.</span> <span><input checked="" type="checkbox"/> Patent family members are listed in annex.</span> </div>		
* Special categories of cited documents :		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search	Date of mailing of the international search report	
4 May 2000	24/05/2000	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Serbetsoglou, A	

# INTERNATIONAL SEARCH REPORT

Int. Patent Application No

PCT/US 00/00794

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>WO 97 39089 A ( THE PROCTER &amp; GAMBLE CO.)  23 October 1997 (1997-10-23)  page 3, line 31 -page 22, line 35  page 50, line 28 - line 32  page 43, line 1 - line 37  claims 1-9</p>	1-11
Y	<p>WO 97 39091 A ( THE PROCTER &amp; GAMBLE CO.)  23 October 1997 (1997-10-23)  cited in the application  claims 1-4  page 48 -page 53  page 68 -page 69</p>	1-11

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/00794

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9806808	A	19-02-1998	AU 6769996 A CZ 9900430 A EP 0925346 A	06-03-1998 11-08-1999 30-06-1999
WO 9839403	A	11-09-1998	AU 2198097 A EP 0964909 A ZA 9801889 A	22-09-1998 22-12-1999 01-09-1998
WO 9739089	A	23-10-1997	AU 2675497 A AU 2734597 A AU 2923197 A AU 2991097 A BR 9708678 A BR 9708691 A CA 2252359 A CA 2252362 A CA 2252363 A CA 2252424 A CA 2252434 A CA 2252435 A CA 2252437 A CZ 9803341 A CZ 9803342 A CZ 9803343 A CZ 9803345 A EP 0898606 A EP 0906274 A EP 0898607 A EP 0898608 A EP 0898609 A EP 0898610 A EP 0900181 A HU 9901806 A JP 11507987 T JP 11507955 T JP 11507956 T JP 11507957 T NO 984789 A NO 984790 A NO 984791 A WO 9738972 A WO 9739087 A WO 9739088 A WO 9739090 A WO 9739091 A WO 9738957 A US 6008181 A AU 2461497 A BR 9708682 A CA 2252436 A CN 1221397 A CZ 9803344 A EP 0898554 A JP 11507954 T WO 9738956 A	07-11-1997 07-11-1997 07-11-1997 07-11-1997 03-08-1999 03-08-1999 23-10-1997 23-10-1997 23-10-1997 23-10-1997 23-10-1997 23-10-1997 23-10-1997 17-03-1999 17-03-1999 17-03-1999 17-03-1999 03-03-1999 07-04-1999 03-03-1999 03-03-1999 03-03-1999 03-03-1999 10-03-1999 29-11-1999 13-07-1999 13-07-1999 13-07-1999 13-07-1999 15-12-1998 15-12-1998 15-12-1998 23-10-1997 23-10-1997 23-10-1997 23-10-1997 23-10-1997 23-10-1997 28-12-1999 07-11-1997 03-08-1999 23-10-1997 30-06-1999 17-03-1999 03-03-1999 13-07-1999 23-10-1997
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/00794

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9739091      A		AU 2923197 A	07-11-1997
		AU 2991097 A	07-11-1997
		BR 9708678 A	03-08-1999
		BR 9708691 A	03-08-1999
		CA 2252359 A	23-10-1997
		CA 2252362 A	23-10-1997
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		CA 2252424 A	23-10-1997
		CA 2252434 A	23-10-1997
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		CA 2252437 A	23-10-1997
		CZ 9803341 A	17-03-1999
		CZ 9803342 A	17-03-1999
		CZ 9803343 A	17-03-1999
		CZ 9803345 A	17-03-1999
		EP 0898606 A	03-03-1999
		EP 0906274 A	07-04-1999
		EP 0898607 A	03-03-1999
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		EP 0898609 A	03-03-1999
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		EP 0900181 A	10-03-1999
		HU 9901806 A	29-11-1999
		JP 11507987 T	13-07-1999
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		AU 2461497 A	07-11-1997
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		CZ 9803344 A	17-03-1999
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